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10/727,258	12/03/2003	Nisheth P. Joshi	M61.12-0563	4660
27366 7590 03/06/2008 WESTMAN CHAMPLIN (MICROSOFT CORPORATION) SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319				
EXAMINER TRUONG, CAM Y T				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/727,258

**Applicant(s)**

JOSHI ET AL.

**Examiner**

Cam Y T. Truong

**Art Unit**

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 7- 24, 26, 28, 31-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7- 24, 26, 28, 31-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant has amended claims 1 and 20 and cancel claims 4, 6, 25, 27, 29-30 in the amendment filed on 11/8/2007.

Claims 1-3, 5, 7- 24, 26, 28, 31-34 are pending in this Office Action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, 5, 7- 24, 26, 28, 31-34 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that the cited references do not teach the limitation " wherein the intermediate database system includes an entity extension table and an entity base table".

In response to applicant's argument, claims have been considered but are moot in view of the new ground(s) of rejection.

### **Specification**

3. Specification is object under 37 CFR 1.75 because the specification has not provided antecedent basis for the phrase "user-configurable" in claim 20. Applicant has not provided an explicit and deliberate definition of user-configurable.

### ***Claim Objections***

4. Claim 26 objected to under 37 CFR 1.75(c) as being in improper form because claim 26 is depend on claim 25, which is canceled. See MPEP § 608.01(n).

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Accordingly, the claim 26 has not been further treated on the merits. In this case, Examiner assumed that claim 26 is dependent on claim 20.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce et al (or hereinafter "Pryce") (US 7257597).

As to claim 1, Warshavsky teaches a method of migrating business data from a source system to an extensible destination system (col. 4, lines 65-67):

"examining a structural definition of the extensible destination system" as the XML Mapping definition of the XML system consists of three entities; object, Component, and field. The object identifies a specific group of tables and single. The above information shows that the XML Mapping definition of the XML system is examined (col. 3, lines 40-45),

"synchronizing a structure of an intermediate database system with the extensible destination system" as an XML converter 116 maps the set of relational data to an XML document 104 using the set of XML Mapping definitions constructed for a

particular application. The XM converter is represented as an initialization tool (col. 4, lines 65-67);

"populating the synchronized intermediate database system with the source data" as storing business data in a relational database, the business data includes an employee or a sales order (col. 1, lines 58-59; col. 4, lines 48-52);

"migrating the source data from the intermediate database system to the extensible destination system" as transferring relational data in an XML document over a network (col. 2, lines 40-45).

"collecting source data from the source system" as (col. 1, lines 58-67; col. 2, lines 1-5)

Earshavsky does not explicitly teach the claimed limitation " wherein the intermediate database system includes an entity extension table and an entity base table".

Pryce teaches the legacy system has legacy base table (fig. 8, col. 2, lines 55-60). Legacy child table is inserted a new record (fig. 8). Legacy child table is represented as extensible table.

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Pryce's teaching of the legacy system has legacy base table and child table to Abrams's system in order to transfer data from old system to a new system quickly and further allow users to extend tables in a relational database for storing values or definitions of associated with new attributes in the attribute table.

As to claim 2, Varshavsky teaches the claimed limitation "accessing metadata related to the extensible destination system" as (col. 1, lines 35-50).

As to claim 3, Varshavsky teaches the claimed limitation "wherein synchronizing the structure of the intermediate database system with the extensible destination system includes invoking an initialization tool" as an XML converter 116 maps the set of relational data to an XML document 104 using the set of XML Mapping definitions constructed for a particular application. The XM converter is represented as an initialization tool (col. 4, lines 65-67).

As to claim 5, Varshavsky teaches the claimed limitation "wherein the intermediate database system includes an entity information table" as (col. 6, lines 55-67).

As to claim 8, Varshavsky teaches the claimed limitation "wherein migrating the source data from the intermediate database system to the extensible destination system is done according to migration overhead information" as (col. 5, lines 10-20; col. 4, lines 40-57).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce and further in view of Suver (6016497).

As to claim 7, Warshavsky does not explicitly teach the claimed limitation "the entity extension table is populated based upon an extension in the extensible destination system". Suver teaches a system constructed in accordance as described herein, a user adds all the necessary columns to a single table in the schema. When the user stores data in the table, each row only needs to contain information on the particular test the patient received. The above information shows the extended table is stored (col. 28, lines 2-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Suver's teaching of a system constructed in accordance as described herein, a user adds all the necessary columns to a single table in the schema. When the user stores data in the table, each row only needs to contain information on the particular test the patient received to Warshavsky's system in order to allow users to extend tables in a relational database for storing data.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce and further in view of Saake et al (or hereinafter "Saake") (US 20040143563).

As to claim 9, Warshavsky does not explicitly teach the claimed limitation "the migration overhead information is user-configurable".

Saake teaches user-configurable (paragraph 0060).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Saake's teaching of user-configurable to Varshavsky's system in order to provide a flexible system so that a user can create a configurable structure to migrate data quickly.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce and further in view of Saake and Amborse (US 20020065879) .

As to claim 10, varshavsky does not explicitly teach the claimed limitation "wherein user-configuration is limited to using one or more predefined software procedures".

Amborse teaches customer configuration is limited to customizing business rules (paragraph [0170]).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Amborse's teaching of customer configuration is limited to customizing business rules to Warshavsky's system in order to greatly reducing the cost and risk of customer application configuration.

10. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce and further in view of Lau (6502098).



As to claim 11, Varshavsky does not explicitly teach the claimed limitation "wherein migration overhead information includes information about which entities are to be migrated".

Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information about which records are to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 12, Varshavsky does not explicitly teach the claimed limitation "wherein migration overhead information includes information about how many entities will be migrated". Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information about which records are to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 13, Varshavsky teaches the claimed limitation "wherein migration overhead information includes information about which attributes will be migrated".

Lau teaches the table corresponding to data transfer files. The table includes attributes that should be to be transferred (col. 6, lines 1-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes attributes that should be to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 14, Varshavsky does not explicitly teach the claimed limitation "wherein migration overhead information includes information about migration order". Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information in order about which records are to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 15, Varshavsky does not explicitly teach the claimed limitation "wherein migration overhead information includes information about migration order".

Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information in order about which records are to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 16, Varshavsky does not explicitly teach the claimed limitation "wherein the EntityMigrationInfor table specifies information about migration for each entities to be migrated". Lau teaches the table corresponding to data transfer files. The table includes detail information about which records are to be transferred (col. 6, lines 1-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information in order about which records are to be transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 17, Varshavsky teaches the claimed limitation "wherein migration overhead information includes an entityAttribute table" as (col. 6, lines 40-55).

As to claim 18, Varshavsky teaches the claimed limitation "wherein the migration overhead information is stored as part of the intermediate database" as (col. 6, lines 55-67).

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Pryce and further in view of Macleod et al (or hereinafter "Macleod") (US 6356901).

As to claim 19, Varshavsky does not explicitly teach the claimed limitation "SQL server". Macleod teaches SQL server (col. 7, lines 25-30).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Macleod teaching of SQL server to Varshavsky's system in order to transfer data in a relational database to another format easily.

12. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Cabrera et al (or hereinafter "6269382").

As to claim 20, Varshavsky teaches claimed limitations:

"providing an intermediate database system" as (col. 4, lines 48-52);

"populating the synchronized intermediate database system with source data" as storing business data in a relational database, the business data includes an employee or a sales order (col. 1, lines 58-59; col. 4, lines 48-52);

"migrating the source data from the intermediate database system to the extensible destination system in accordance with migration overhead information" as transferring relational data in an XML document over a network (col. 2, lines 40-45).

"collecting source data from the source system" as (col. 1, lines 58-67; col. 2, lines 1-5)

"synchronizing the structure of the intermediate database system with the destination system " as an XML converter 116 maps the set of relational data to an XML document 104 using the set of XML Mapping definitions constructed for a particular application. The XM converter is represented as an initialization tool (col. 4, lines 65-67).

Earshavsky does not explicitly teach the claimed limitation "wherein the migration overhead information is user-configurable and includes information about which entities are to be migrated, which attributes will be migrated, and migration order".

Cabrera teaches determining which attributes are to be migrated (fig. 10) and identifying files (entities) which are to be migrated (col. 12, lines 35-40). A migration policy migrates the data to remote storage a head of time that data actually meets the designated migration criteria (col. 5, lines 20-25). Migrating candidates are eligible for migration at a time prior to the time specified for migration (col. 4, lines 62-67). One a file has attained the pre-migration state, the hierarchical storage system waits until the file actually meets the migration criteria (col. 5, lines 1-5)

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Cabrera's teaching of determining which attributes are

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to be migrated (fig. 10) and identifying files (entities) which are to be migrated (col. 12, lines 35-40), utilizing a migration policy migrates the data to remote storage a head of time that data actually meets the designated migration criteria, migrating files in order at a time prior to the time specified for migration to Earshavsky's system in order to migrate data from a system to another with a faster speed.

As to claim 21, Varshavsky teaches the claimed limitation "wherein the intermediate database system includes an entity base table" as (col. 6, lines 55-67).

As to claim 22, Varshavsky teaches the claimed limitation "wherein the intermediate database system includes an entity information table" as (col. 6, lines 55-67).

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Cabrera and further in view of Nelson (US 6112199).

As to claim 23, Varshavsky does not teach the claimed limitation "the intermediate database system includes an entity extension table". Nelson teaches extension table (col. 6, lines 45-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nelson's teaching of extension table to varshavsky's system in order to allow users to extend tables in a relational database for storing data.

14. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Cabrera and further in view of Nelson and Suver (6016497).

As to claim 24, Varshavsky does not explicitly teach the claimed limitation "the entity extension table is populated based upon an extension in the extensible destination system". Suver teaches a system constructed in accordance as described herein, a user adds all the necessary columns to a single table in the schema. When the user stores data in the table, each row only needs to contain information on the particular test the patient received. The above information shows the extended table is stored (col. 28, lines 2-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Suver's teaching of a system constructed in accordance as described herein, a user adds all the necessary columns to a single table in the schema. When the user stores data in the table, each row only needs to contain information on the particular test the patient received to Varshavsky's system in order to allow users to extend tables in a relational database for storing data.

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Cabrera and further in view of Suver (6016497) and Amborse (US 20020065879) .

As to claim 26, varshavsky does not explicitly teach the claimed limitation "wherein user-configuration is limited to using one or more predefined software procedures".

Amborse teaches customer configuration is limited to customizing business rules (paragraph [0170]).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Amborse's teaching of customer configuration is limited to customizing business rules to Varshavsky's system in order to greatly reducing the cost and risk of customer application configuration.

16. Claims 28, 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warshavsky et al (or hereinafter "Warshavsky") (US 6732095) in view of Cabrera and further in view of Lau (6502098).

As to claim 28, Varshavsky does not explicitly teach the claimed limitation "wherein migration overhead information includes information about how may entities will be migrated". Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information about which records are to be transferred



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to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 31 Varshavsky does not explicitly teach the claimed limitation "wherein the migration overhead information includes an EntityMigrationInfor table". Lau teaches the table corresponding to data transfer files. The table includes information about which records are to be transferred (col. 6, lines 1-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information in order about which records are to be transferred to Varshavsky's system in order to provide for a system for exorting of data in a XML system correctly.

As to claim 32, Varshavsky does not explicitly teach the claimed limitation "wherein the EntityMigrationInfor table specifies information about migration for each entities to be migrated". Lau teaches the table corresponding to data transfer files. The table includes detail information about which records are to be transferred (col. 6, lines 1-35).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lau's teaching of the table corresponding to data transfer files. The table includes information in order about which records are to be

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transferred to Varshavsky's system in order to provide for a system for exporting of data in a XML system correctly.

As to claim 33, Varshavsky teaches the claimed limitation "wherein migration overhead information includes an entityAttribute table" as (col. 6, lines 40-55).

As to claim 34, Varshavsky teaches the claimed limitation "wherein the migration overhead information is stored as part of the intermediate database" as (col. 6, lines 55-67).

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Abrams (US 6151608).

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Cam Y Truong/  
Primary Examiner, Art Unit 2162